



### ABSTRACT OF THE DISCLOSURE

An optical fiber transmission line for realizing satisfactory long haul transmission characteristics using two kinds of optical fibers. The optical fiber transmission line includes a plurality of local dispersion compensating spans, wide dispersion compensating spans disposed at predetermined intervals, and optical repeating amplifiers to connect each span. The local dispersion compensating span includes a first optical fiber with positive dispersion having an effective core area of  $130 \mu\text{m}^2$  or more and a second optical fiber with a negative dispersion value of -50 ps/nm/km or less to transmit the light output from the first optical fiber. The wide dispersion compensating span consists of a third optical fiber having the same configuration and composition with the first optical fiber.